

# CHAPTER 6

## GLOSSARY AND ACRONYMS

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### 6.1 GLOSSARY

#### A

**Acre-foot**—The quantity of water required to cover 1 acre to a depth of 1 foot. Equal to 1,233.5 cubic meters (43,560 cubic feet).

**Anadromous**—In general, this term is used to refer to fish, such as salmon or steelhead trout that hatch in fresh water, migrate to and mature in the ocean, and return to freshwater as adults to spawn. Section 3403(a) of the CVPIA defines anadromous as “those stocks of salmon (including steelhead), striped bass, sturgeon, and American shad that ascend the Sacramento and San Joaquin rivers and their tributaries and the Sacramento-San Joaquin Delta to reproduce after maturing in San Francisco Bay or the Pacific Ocean”.

**Aquifer**—An underground geologic formation in which water can be stored.

#### B

**Bay-Delta Plan Accord**—In December 1994, representatives of the state and federal governments and urban, agricultural and environmental interests agreed to the implementation of a Bay-Delta protection plan through the SWRCB, in order to provide ecosystem protection for the Bay-Delta Estuary. The Draft Bay-Delta Water Control Plan, released in May 1995, superseded D-1485.

**Beneficial use**—Those uses of water as defined in the State of California Water Code (Chapter 10 of Part 2 of Division 2), including but not limited to agricultural, domestic, municipal, industrial, power generation, fish and wildlife, recreation, and mining.

**Biological opinion**—Document issued under the authority of the Endangered Species Act stating the Service and/or the National Oceanic and Atmospheric Administration, Fisheries (NOAA Fisheries) finding as to whether a federal action is likely to jeopardize the continued existence of a threatened or endangered species or result in the destruction or adverse modification of critical habitat. This document may include:

***Critical habitat***—A description of the specific areas with physical or biological features essential to the conservation of a listed species and which may require special management considerations or protection. These areas have been legally designated via Federal Register notices.

***Jeopardy opinion***—The Service or NOAA Fisheries opinion that an action is likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat. The finding includes reasonable and prudent alternatives, if any.

***No jeopardy opinion***—The Service or NOAA Fisheries finding that an action is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of critical habitat.

## C

**CALFED**—Joint federal and state program to address water-related issues in the Sacramento-San Joaquin Rivers Delta.

**Candidate species**—Plant or animal species not yet officially listed as threatened or endangered, but which is undergoing status review by the Service or the NOAA Fisheries

**Central Valley Project (CVP)**—As defined by Section 3403(d) of the CVPIA, “all Federal reclamation projects located within or diverting water from or to the watershed of the Sacramento and San Joaquin rivers and their tributaries as authorized by the Act of August 26, 1937 (50 Stat. 850) and all Acts amendatory or supplemental thereto, ....”

**Central Valley Project service area**—As defined by Section 3403(e) of the CVPIA, “that area of the Central Valley and San Francisco Bay Area where water service has been expressly authorized pursuant to the various feasibility studies and consequent congressional authorizations for the Central Valley Project”.

**Central Valley Project water**—As defined by Section 3403(f) of the CVPIA, “all water that is developed, diverted, stored, or delivered by the Secretary in accordance with the statutes authorizing the Central Valley Project in accordance with the terms and conditions of water rights acquired pursuant to California law”.

**Central Valley Project water service contractors**—Water users that have contracted with the US Bureau of Reclamation for water.

**Conjunctive use**—The planned use of groundwater in conjunction with surface water in overall management to optimize water resources.

**Cost-of-service water rates**—The water rate charged to recover all operating and capital costs, and individual contractor operating deficits, associated with the providing of water service. Components of operation and maintenance (O&M) and capital cost vary by contractor depending on services required for water delivery. Differs from full cost in that no charge for interest on capital is included.

**Cubic feet per second**—A measure of the volume rate of water movement. As a rate of streamflow, a cubic foot of water passing a reference section in 1 second of time. One cubic foot per second equals 0.0283 m<sup>3</sup>/s (7.48 gallons per minute). One cubic foot per second flowing for 24 hours produces approximately 2 acre-feet.

## D

**Decision -1485 (D-1485)**—The SWRCB decision specifying water quality standards for the Sacramento-San Joaquin Delta and Suisun Marsh.

**Dedicated Water**—Refers to the 800,000 acre feet of CVP yield identified in Section 3406(b)(2) of the CVPIA that the Secretary must dedicate and manage for the primary purpose of implementing the fish and wildlife purposes and measures of the act, to help California protect the Bay-Delta estuary, and to help meet legal obligations imposed on the CVP under state and federal law, including the Federal Endangered Species Act (ESA).

**Dry-farmed**—Crop production without the use of applied water.

## E

**Endangered species**—Any species or subspecies of bird, mammal, fish, amphibian, reptile, or plant which is in serious danger of becoming extinct throughout all, or a significant portion of its range. Federally endangered species are officially designated by the Service or the NOAA Fisheries and published in the Federal Register.

**Environmental Assessment**—A concise public document that a lead agency prepares pursuant to the National Environmental Policy Act when a project is not covered by a categorical exclusion and the lead agency does not know whether the impacts will be significant. The environmental assessment is the primary tool used by an agency to determine whether to prepare an environmental impact statement.

**Ephemeral stream**—Flows briefly only in direct response to precipitation.

**Exotic species**—Introduced species not native to the place where they are found.

## F

**Fallowed land**—Cultivated land that lies idle during a growing season.

**Full cost water rates**—Adds an interest component to the cost-of-service water rates to recover costs of financing the construction of irrigation facilities placed in service. The interest component is calculated in accordance with the Reclamation Reform Act of 1982.

**Full cost**—As defined by Section 3403(g) of the CVPIA, “the meaning given such term in paragraph (3) of section 202 of the Reclamation Reform Act of 1982”. As defined by Section 202(3)(A) of the Reclamation Reform Act of 1982, “an annual rate as determined by the Secretary that shall amortize the expenditures for construction properly allocable to irrigation facilities in service, including all operation and maintenance deficits funded, less payments, over such periods as may be required under Federal Reclamation law or applicable contract provisions, with interest on both accruing from the date of enactment of the Act on costs outstanding at that date, or from the date incurred in the case of costs arising subsequent to the date of enactment of this Act: Provided that operation,

maintenance and replacement charges required under federal reclamation law, including this title, shall be collected in addition to the full cost charge”.

## G

**Groundwater**—Water stored underground in pore spaces between rocks and in other alluvial materials and in fractures of hard rock occurring in the saturated zone.

## H

**Habitat**—Area where a plant or animal lives.

## I

**Intermittent or seasonal stream**—Stream on or in contact with the groundwater table that flows only at certain times of the year when the groundwater table is high.

**Irrigation water**—Water made available from the project which is used primarily in the production of agricultural crops or livestock, including domestic use incidental thereto, and the watering of livestock. Irrigation water does not include water used for human uses such as the watering of landscaping or pasture for animals (e.g., horses) which are kept for personal enjoyment. It generally does not include water delivered to landholdings operated in units of fewer than five acres, unless the contractor establishes to the satisfaction of the contracting officer that the use of the water delivered to any such landholding is a use within this definition.

## L

**Land classification**—An economic classification of variations in land reflecting its ability to sustain long-term agricultural production.

**Land retirement**—Permanent or long-term removal of land from agricultural production.

**Long-term contract**—Contracts with terms of more than ten years.

## O

**Operating Non-Federal Entity**—A Non-Federal entity that operates and maintains federal facilities pursuant to an agreement with the United States.

## P

**Perennial stream**—Flows continuously throughout the year.

**Place of use**—The geographic area specified in a water right permit or license issued by the California SWRCB, wherein the water may be used.

**Point of diversion**—The point along a river or stream that a water right permit or license specifies water may be diverted to areas away from the river.

**Programmatic Environmental Impact Statement**—EIS prepared prior to a federal agency's decision regarding a major program, plan, or policy. It is usually broad in scope and followed by subsequent more narrowly focused NEPA compliance documents such as site-specific environmental assessments and environmental impact statements.

## R

**Range**—Geographic region in which a given plant or animal normally lives or grows.

**Reclamation laws**—As defined by Section 3403(I) of the CVPIA, “the Act of June 17, 1902 (82 Stat. 388) and all Acts amendatory thereof or supplemental thereto”.

**Repayment contract**—As defined by Section 3403(k) of the CVPIA, “the same meaning as provided in sections 9(d) and 9(e) of the Reclamation Project Act of 1939 (53 Stat. 1187, 1195), as amended”. See water service contract in Appendix F.

**Reservoir**—Artificially impounded body of water.

**Restoration Fund**—As defined in Section 3403(l) of the CVPIA, “the Central Valley Project Restoration Fund established by this title”.

**Riparian**—Areas along or adjacent to a river or stream bank whose waters provide soil moisture significantly in excess of that otherwise available through local precipitation.

## S

**Scoping**—The process of defining the scope of a study, primarily with respect to the issues, geographic area, and alternatives to be considered. The term is typically used in association with environmental documents prepared under the National Environmental Policy Act.

**Secretary**—As defined by Section 3403(m) of the CVPIA, “the Secretary of the Interior”.

**Seepage**—Water that escapes control through canal lining, stream banks, or other holding or conveyance systems.

**Shasta Criteria**—Establishes when a water year is considered critical, based on inflow to Shasta Lake. When inflows to Shasta Lake fall below the defined thresholds, the water year is defined as critical, and water deliveries to Sacramento River Settlement and San Joaquin River Exchange Contractors may be reduced up to 25 percent. A year is critical when the full natural inflow to Shasta Lake for the current water year (October 1 of the preceding calendar year through September 30 of the current calendar year) is equal to or less than 3.2 million acre-feet. This is considered a single-deficit. A year is also critical when the accumulated difference (deficiency) between 4 million acre-feet and the full natural inflow to Shasta Lake for successive previous years, plus the forecasted deficiency for the current water year, exceeds 800,000 acre-feet.

**Shortages**—Reductions in deliveries of contracted firm water. The amount of these reductions is expressed as the percent of full annual supply allocated.

**Short-term contract**—Contracts with a term of more than five years but less than ten years.

**Subsidence**—A local mass movement that involves principally the gradual downward settling or sinking of the earth's surface with little or no horizontal motion. It may be due to natural geologic processes or mass activity such as removal of subsurface solids, liquids, or gases, ground water extraction, and wetting of some types of moisture-deficient loose or porous deposits.

## T

**Threatened species**—Legal status afforded to plant or animal species that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range, as determined by the Service or the NOAA Fisheries.

**Tiering**—Procedure which allows an agency to avoid duplication of paperwork through incorporation by reference of the general discussions and relevant specific discussions from a NEPA document of broader scope into a NEPA document of narrower scope.

**Total supply**—Total water supply available to area (surface water plus groundwater).

**Transfers, sales, and exchanges**—A transfer or sale is a one way transaction to another contractor usually on an annual basis, but could be on a long-term basis. An exchange is a two way transaction wherein a contractor transfers a quantity of water to another contractor for a like amount to be returned at a later date. CVP contractors may transfer, sell and exchange to other contractors their contractual water supply only with written consent from the United States.

**Tributary**—A stream feeding into a larger stream or a lake.

**Turn outs**—The physical structures along main canal systems for distribution of water.

## W

**Water acquisition**—The purchase of water from willing sellers.

**Water rights**—California recognizes riparian and appropriative water rights.

***Riparian water rights***—Exists for lands which abut a waterway, or which overly an underground stream. Generally, there is no riparian right to diffused surface waters or swamps. The extent of the frontage along a waterway in no way governs the quantity of the water right. Use of water through riparian rights must be on riparian land and within the watershed of the stream. Riparian rights may not be lost as a result of nonuse.

***Appropriative water rights***—Water rights based upon the principle of prior appropriations, or “first in time, first in right”. In order to maintain appropriative water rights, the right to any water must be put to

beneficial use. Nonuse of appropriative water rights may result in the loss of those water rights. In a conflict between a riparian water user and an upstream appropriator, the riparian user has priority, provided that the water is being used in a reasonable and beneficial manner.

**Watershed**—A region or area bounded peripherally by a water parting and draining ultimately to a particular watercourse or body of water.

**Water year**—Usually when related to hydrology, the period of time beginning October 1 of one year and ending September 30 of the following year and designated by the calendar year in which it ends.

**Wetland**—A zone periodically or continuously submerged or having high soil moisture, which has aquatic and/or riparian vegetation components, and is maintained by water supplies significantly in excess of those otherwise available through local precipitation.

**Wildlife habitat**—An area that provides a water supply and vegetative habitat for wildlife.

## 6.2 ACRONYMS

| <u>Acronym</u> | <u>Full Phrase</u>   |
|----------------|--|
| ACHP           | Advisory Council on Historic Preservation                              |
| af             | acre-feet  |
| APCD           | Air Pollution Control District   |
| APE            | area of potential effect   |
| AQMD           | Air Quality Management District  |
| ARPA           | Archaeological Resources Protection Act                                |
| AIRFA          | American Indian Religious Freedom Act                                  |
| B.P.           | Before Present   |
| CAA            | Clean Air Act  |
| Caltrans       | California Department of Transportation                                |
| CAP            | Clean Air Plan   |
| CDFG           | California Department of Fish and Game                                 |
| CEQ            | Council on Environmental Quality                                       |
| CEQA           | California Environmental Quality Act                                   |
| cfs            | cubic feet per second  |
| CFR            | Code of Federal Regulations  |
| CNPS           | California Native Plant Society  |
| CNDDDB         | California Natural Diversity Database                                  |
| CO             | carbon monoxide  |
| COA            | coordinated operating agreement  |
| COE            | US Army Corps of Engineers   |
| CVGSM          | Central Valley Groundwater - Surface Water Simulation Model            |
| CVP            | Central Valley Project   |
| CVPIA          | Central Valley Project Improvement Act                                 |
| CVPM           | Central Valley Production Model  |
| CVP-OCAP       | Central Valley Project Operations Criteria and Plan                    |
| CWA            | Clean Water Act  |
| D-1485         | Decision 1485 (State Water Resources Control Board)                    |
| DEIS/DEIR      | draft environmental impact statement/draft environmental impact report |
| DPR            | California Department of Parks and Recreation                          |
| DWR            | California Department of Water Resources                               |
| EA             | environmental assessment   |
| EIS            | environmental impact statement   |
| EPA            | US Environmental Protection Agency                                     |
| ESA            | Endangered Species Act   |
| ESU            | evolutionary significant unit  |
| ET             | evapotranspiration   |
| ETAW           | evapotranspiration of applied water                                    |
| FONSI          | finding of no significant impact                                       |
| FWCA           | Fish and Wildlife Coordination Act                                     |
| gpm            | gallons per minute   |



| <b>Acronym</b>   | <b>Full Phrase</b>  |
|------------------|---|
| IMPLAN           | Impact Analysis for Planning (regional economic input-output model) |
| Income POW       | Income by Place of Work   |
| Interior         | US Department of the Interior                                       |
| ITA              | Indian Trust Asset  |
| LTCR             | Long Term Contract Renewal  |
| mafy             | million acre feet per year  |
| M&I              | municipal and industrial  |
| MCL              | maximum contaminant level   |
| MOA              | memorandum of agreement   |
| NAGPRA           | Native American Graves Protection Repatriation Act                  |
| NAHC             | Native American Heritage Commission                                 |
| NDDB             | Natural Diversity Database  |
| NEPA             | National Environmental Policy Act                                   |
| NHL              | National Historic Landmark  |
| NHPA             | National Historic Preservation Act                                  |
| NMFS             | National Marine Fisheries Services                                  |
| NOAA Fisheries   | National Oceanic and Atmospheric Administration, Fisheries          |
| NOI              | notice of intent  |
| NPS              | National Park Service   |
| NRCS             | National Resources Conservation District                            |
| NRHP             | National Register of Historic Places                                |
| NWR              | National Wildlife Refuge  |
| O&M              | operations and maintenance  |
| OCAP             | operations criteria and plan  |
| OHP              | Office of Historic Preservation                                     |
| PEIS             | programmatic environmental impact statement                         |
| PM <sub>10</sub> | particulate matter of 10 microns in aerometric diameter or less     |
| POW              | place of work   |
| ppb              | parts per billion   |
| ppm              | parts per million   |
| RBDD             | Red Bluff Diversion Dam   |
| Reclamation      | US Bureau of Reclamation  |
| ROD              | record of decision  |
| ROG              | reactive organic gases  |
| ROI              | region of influence   |
| RRA              | Reclamation Reform Act  |
| SDWA             | Safe Drinking Water Act   |
| Secretary        | Secretary of the Interior   |
| Service          | US Fish and Wildlife Service  |
| SIP              | State Implementation Plan   |
| SHPO             | California State Historic Preservation Officer                      |
| SO <sub>x</sub>  | oxides of sulfur  |
| SPW              | State Project Water   |
| SRA              | shaded riverine aquatic   |
| SVAB             | Sacramento Valley Air Basin   |

| <b><u>Acronym</u></b> | <b><u>Full Phrase</u></b>             |
|-----------------------|---------------------------------------|
| SWP                   | State Water Project                   |
| SWRCB                 | State Water Resources Control Board   |
| Taf                   | thousand acre-feet                    |
| TCC                   | Tehama-Colusa Canal                   |
| TCPs                  | traditional cultural properties       |
| TDS                   | total dissolved solids                |
| TOC                   | total organic carbon                  |
| TOG                   | total organic gases                   |
| TUAs                  | traditional use areas                 |
| USACE                 | United States Army Corps of Engineers |
| USC                   | United States Code                    |
| WD                    | Water District                        |